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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/585,248 | 07/05/2006 | Shinichi Wada | 050850-07107 | 6074 |
| 53989 | 7590 | 05/27/2009 | | |
| Dickinson Wright PLLC James E. Ledbetter, Esq. International Square 1875 Eye Street, N.W., Suite 1200 Washington, DC 20006 | | | EXAMINER ASHFORD, TAMARA R | |
| | | | ART UNIT 2627 | PAPER NUMBER |
| | | | MAIL DATE 05/27/2009 | DELIVERY MODE PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/585,248

Applicant(s)

WADA ET AL.

Examiner

Tamara Ashford

Art Unit

2627

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/ICE)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____
- Paper No(s)/Mail Date 7/5/06

DETAILED ACTION

This is in response to the application filed on July 28, 2005 in which claims 1-6 are presented for examination.

1. It would be of great assistance to the Office if all incoming papers pertaining to a filed application carried the following items:

1. Application number (checked for accuracy, including series code and serial no.).
2. Group art unit number (copied from most recent Office communication).
3. Filing date.
4. Name of the examiner who prepared the most recent Office action.
5. Title of invention.
6. Confirmation number (See MPEP § 503).

Priority

2. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on September 3, 2004. It is noted, however, that applicant has not filed a certified copy of application 2004-257560 as required by 35 U.S.C. 119(b).

Drawings

3. The drawings were received on July 5, 2006. These drawings are accepted.

Specification

4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

5. The abstract of the disclosure is objected to because it is more than one paragraph in length. Correction is required. See MPEP § 608.01(b).

6. The disclosure is objected to because of the following informalities: "hold" should be revised to -- hole -- (Page 8, Paragraph 11, last sentence). Appropriate correction is required.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saji et al. (US 20020159373 A1) in view of Kim (US 20030012121 A1), and in further view of Davis et al. (US 5,684,776).

Regarding claim 1, Saji et al. (hereinafter referred as "Saji") discloses a disk apparatus (Fig. 1A, 1, and Paragraph 76) comprising a chassis outer sheath having a base body and a lid (Fig. 1B, 90a, 90b) in which a front surface of the outer sheath is formed with a disk inserting opening (Paragraph 79) into which a disk is directly inserted. The base body is provided with a traverse base (Fig. 1A, 100, and Paragraph 78), and the traverse base is provided with a spindle motor (Fig. 1A, 110), a pickup (Fig. 1A, 120) and drive means for moving the pickup (Paragraph 78). The disk apparatus further comprises a traverse base moving means for displacing the traverse base between the base body and the lid that includes a loading motor (Fig. 1A, 281, and Paragraph 82) provided on the chassis outer sheath, a slider (Fig. 1A, 210, 310, and Paragraph 80) which slides by driving of the loading motor, and a traverse cam member (Fig. 5A, 210a, b, and Paragraph 101) provided on the slider. Saji does not disclose a spindle cam member. Kim discloses a disk apparatus (Fig. 2, 100) comprising a spindle cam member (Fig. 3, 102, 121, and Fig. 4, 120, 121) which is driven by a loading motor and upwardly (upon disc insertion) and downwardly (upon disc ejection) moves a spindle motor with respect to a traverse base (Paragraph 23, and 25) to adjust the skew between the optical pickup and the disk. It would have been obvious to one having ordinary skill in the art at the time the invention was made to include a spindle cam member in the disk apparatus disclosed by Saji to move the

spindle motor relative to the transverse base as described by Kim to provide skew adjustment between the optical pickup and the disk. Neither Saji, nor Kim discloses the spindle motor is biased toward the traverse base by a resilient member. Davis et al. (hereinafter referred as "Davis") discloses a disk apparatus in which a spindle motor is biased toward a base by a resilient member (Column 7, lines 16-21). It would have been obvious to one having ordinary skill in the art at the time the invention was made to add a resilient member to bias the spindle motor toward the traverse base to reduce vibration between the two components as they move.

Regarding claim 2, Saji does not disclose the slider is provided with a spindle cam. Kim discloses the spindle cam is provided on a slider (Fig. 1, 12, and Fig. 4, 120) that also comprises a cam (Fig. 1, 12a) to move a traverse base (Paragraph 24). It would have been obvious to provide the slider disclosed by Saji with the spindle cam, as disclosed by Kim, to efficiently utilize the disk apparatus space and reduce the number of components.

Regarding claim 3, neither Saji, nor Kim discloses the spindle cam member is separated from the slider and provided on the side of the traverse base. As discussed with regard to claim 2, Kim discloses the spindle cam is provided on a slider that also comprises a cam for a traverse base. As a matter of design choice, it would have been obvious to provide the spindle cam member on the side of the traverse base rather than the slider when combining the teachings of Saji and Kim, since it has been held that rearranging parts of an invention involves only routine skill in the art. In re Japikse, 86 USPQ 70 (CCPA 1950).

Regarding claim 4, Saji does not disclose the spindle motor includes a plurality of pins inserted into the spindle cam member. Kim discloses the spindle motor includes a pin (Fig. 4, 301, and Paragraph 23) inserted into the spindle cam member such that the motion of the spindle cam member driven by the loading motor is transmitted to the spindle motor through the pin. Kim does not disclose additional pins inserted into the spindle cam member, however, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include additional pins, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8 (7th Cir. 1977). In addition, it would have been obvious to combine the teachings of Kim with the invention of Saji for the reasons previously discussed with regard to claim 1.

Regarding claim 5, Saji discloses the loading motor is driven to bring the spindle motor to an uppermost lifted position (Fig. 5B, and Paragraphs 103, and 109) and then the traverse base (along with the spindle motor) is lowered (Fig. 5C, and Paragraph 104). After the traverse base is lowered and the disk is to be ejected, the loading motor is reversely rotated to bring the spindle motor to the uppermost lifted position again (Paragraphs 110, and 112), and then the traverse base is lowered (Paragraph 113).

Regarding claim 6, Saji discloses the spindle motor is actuated and a disk is rotated by a predetermined phase or predetermined time as the optical head is operated to read or write information (Paragraph 104) after the traverse base is lowered. Upon completion of the read or write operation, the loading motor is reversed

to drive lowering of the spindle motor and ejection of the disk as discussed with regard to claim 5.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamara Ashford whose telephone number is (571)270-5877. The examiner can normally be reached on Mon-Fri 7:30am - 5:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrea Wellington can be reached on (571)272-4483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/T. A./
Examiner, Art Unit 2627

/Craig A. Renner/
Primary Examiner, Art Unit 2627